## ABSTRACT

A method and apparatus to control interaction between two multi-threaded processor engines is presented. A first multi-threaded processor engine is configured for connection to a serial link, and performs receive and transmit operations in a first "PHY" mode of operation. A second multi-threaded processor engine is operable to process data received by the first multi-threaded processor over the serial link and to provide the processed data to the first multi-threaded processor engine for transmission over the serial link, when the first multi-threaded processor operates in the PHY mode. Additionally, the first multi-threaded processor engine is configured to execute certain operations, e.g., hardware accelerator operations, at the request of the second multi-threaded processor engine in a second "co-processor" mode of operation.

15